

Claims:

1. A capacitor sensing inspection system, the system comprising a pair of capacitors, the first capacitor in use having a reference package as a dielectric, the second capacitor in use having a package to be measured as a dielectric, the system having a measurement circuit for providing a first indication when the capacitance of the first capacitor is substantially greater than the capacitance of the second capacitor and a second indication when the capacitance of the first capacitor is substantially less than the capacitance of the second capacitor, the first and second indications being indicative of differences between the reference package and the package to be measured and wherein the system further comprises a potentiometer having a variable position for adjusting a balance point of the measurement circuit so as to equalise a response between the first and second indications, characterised in that the capacitor system further comprises an auto-balancer for controlling the balance point, wherein upon activation of the auto-balancer, the potentiometer is adapted to be moved into a first position where a first indication is received from the measurement circuit and into a second position where a second indication is received from the measurement circuit, the auto-balancer being then adapted to move the potentiometer position into a position substantially midway between said first and second positions so as to automatically provide a balance point for the measurement circuit.
2. A system according to claim 1, wherein the activation of the auto-balancer is by means of a user operable switch.

3. A system according to claim 1, wherein the auto-balancer comprises a motor coupled to the potentiometer for moving the potentiometer between the first and second positions.
4. An optical disc inspection system, comprising the capacitor sensing system of claim 1.
5. An inspection system comprising the capacitor sensing system of claim 1, the system further comprising:
  - a transport mechanism for moving at least one package from a start point towards an end point,
  - a stop movable between an inactivate position and an activate position, wherein in the activate position the stop prevents the progress of items along the conveyor belt from the start point to the end point,
  - a control system responsive to a user input to place said inspection system in a teach mode,
  - wherein upon receipt of the user input, the control system activates the stop and upon the exiting of the inspection system from the teach mode causes the stop to move to the inactive position.
6. An inspection system according to claim 5, wherein the control system is adapted to stop the transport mechanism in response to the user input.
7. An inspection system according to claim 6, wherein the control system is adapted to apply a delay between activating the stop and before stopping the transport mechanism.

8. An inspection system according to claim 5, wherein the transport mechanism comprises a conveyor belt system.
9. An inspection system according to claim 8, wherein said conveyor belt system is a twin belt conveyor.
10. An inspection system according to claim 9, wherein axis of motion of the stop is substantially perpendicular to the direction of travel of the conveyor.
11. An inspection system according to claim 9, wherein in the inactivate position, the stop rests below and between the belts of the conveyor system.
12. A capacitor sensing inspection system according to claim 5 wherein the first capacitor is positioned remotely from said transport mechanism.
13. An inspection system according to claim 12, wherein the first capacitor is located in a control panel enclosure of the inspection system.
14. An inspection system according to claim 13, wherein an opening is provided in said control panel enclosure defining a slot for receiving the reference package and wherein a first plate of the first capacitor is disposed on one side of the slot and the second plate of the capacitor is disposed on the opposing side of the slot.
15. An inspection system according to claim 14, wherein the control panel enclosure includes an actuator for ejecting a reference package through the slot opening.

16. An inspection system according to claim 1, further comprising an inspection system for inlay cards in optical disk packages, comprising:
  - a transport mechanism for moving at least one optical disk package along a longitudinal axis,
  - a first sensor for identifying the arrival of an optical disk package at a test location along the longitudinal axis,
  - a second sensor disposed about said test location, the second sensor being a light sensitive sensor having an associated light source and wherein the light sensitive sensor is positioned on one side of the transport mechanism and the light source is positioned on an opposing side of the transport mechanism along an axis which is inclined relative to the longitudinal axis, such that the second sensor is disposed to provide an indication of the presence of an inlay card in an optical disk package when the first sensor identifies the arrival of an optical disk package.
17. An inspection system according to claim 16, further comprising a colour/pattern recognition sensor for testing the correct presence of printed matter on a top and/or bottom surface of a package.
18. An inspection system according to claim 8, further comprising a discard mechanism for the conveyor belt system, the discard mechanism comprising:
  - an opening for receiving a package, the opening being positioned between the first and second belts,
  - an arm movable between a rest position external to the conveyor belt system and an active position, such that when the discard mechanism is activated, the arm is moved from the rest position to the active position displacing one of the at least one packages from one of the belts, thus

allowing the package to fall through and be discarded through the opening.

19. An inspection system according to claim 18, wherein the arm is movable along an axis transverse to the longitudinal axis.
20. An inspection system according to claim 18, wherein the rest position is adjacent to an external edge of one of the belts.